

38492

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

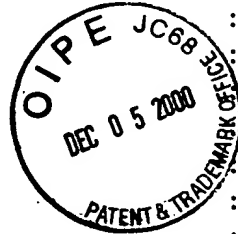
In re Application of

S. Joseph Campanella

Serial No.: 09/640,686

Filed: August 18, 2000

For: Method and Apparatus for Mobile Platform:  
Reception and Synchronization in Direct  
Digital Satellite Broadcast System



Group Art Unit: 2731

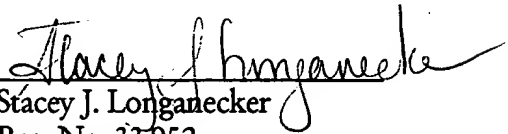
REQUEST FOR RETENTION OF DISCLOSURE DOCUMENT

Reference is made to the following Disclosure Document which contains subject matter related to that disclosed and claimed in the present application:

Number: 447705  
Title: Eureka + Worldspace Mobile  
Date of Deposit: November 24, 1998

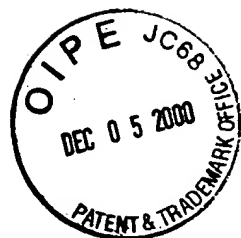
In view of the filing of the present application, it is requested that the Disclosure Document identified above be designated for permanent retention. A copy of the Disclosure Document is attached for reference purposes.

Respectfully submitted,

  
Stacey J. Longanecker  
Reg. No. 33,952

Roylance, Abrams, Berdo & Goodman, L.L.P.  
1300 19<sup>th</sup> Street N.W., Suite 600  
Washington, D.C. 20036  
(202) 659-9076

Dated: 5 November 2000



DISCLOSURE DOCUMENT NO.



447705

FILING FEE: \$10.00  
RETAINED FOR 2 YEARS  
THIS IS NOT A PATENT APPLICATION

PTO-1652 (4/96)

November 24, 1998

Commissioner of Patents and Trademarks  
Washington, D.C. 20231

Doc'd	File
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ROYLANCE, ABRAMS BERDO & GOODMAN, L.L.P. BY	

Re: Submission of Disclosure Document for "Eureka + WorldSpace Mobile"

Dear Sir:

The undersigned, S. Joseph Campanella, assignor to WorldSpace Corporation, requests that the attached paper be accepted under the Disclosure Document program and that it be preserved for a period of (2) years.

A check in the amount of \$10.00 is attached to cover the required fee. Also attached is a stamped, pre-addressed envelope for use by the U.S. Patent and Trademark Office in acknowledging receipt of this document.

Please send the acknowledgment of filing, and any other correspondence relating to this Disclosure Document, to counsel for Worldspace at the following address: John E. Holmes, Roylance, Abrams, Berdo & Goodman, L.L.P., 1225 Connecticut Avenue, N.W., Suite 315, Washington, DC 20036.

Respectfully submitted,

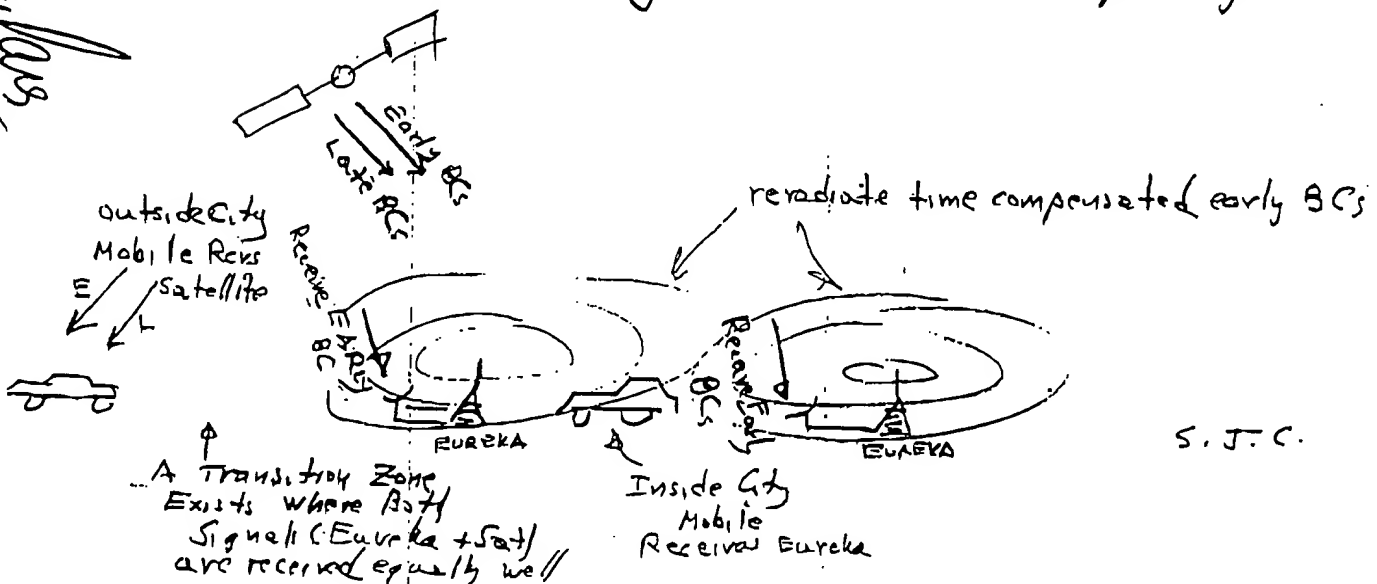
S. Joseph Campanella

# EUREKA + WORLDSPACE MOBILE

- 1) Use Eureka + WS Radios as is to start. Each possess unique features.
- 2) Low intensity satellite radio<sup>RF</sup> design and high intensity terrestrial RF design places conflicting requirements on RF section. High sensitivity plus high intensity received flux density is the problem.
- 3) Likely to require a band pass filter placed around satellite carrier to eliminate terrestrial signal interference from Eureka repeaters.

Typical satellite  $\phi = -124$  to  $-110$  dBW/m<sup>2</sup>. Typical terrestrial  $\phi$  can be as high as  $-40$  dBW/m<sup>2</sup>,  $\Delta = 84$  dB

- 4) Each WorldSpace TOM carrier supports 96 Prime Rate Channels. They can be combined into Broadcast Groups having rates  $n \times 16$  kbit/sec (n < 8)
- 5) For Eureka + WS TOM radio, allocate 16 96 kbit/sec satellite BCs to provide 8 early + 8 late BCs for satellite time diversity. Eureka repeaters would each receive the 8 early channels & transcode them to Eureka COFDM, introduce appropriate delay compensation to synchronize with the late satellite channel and repeat from terrestrial channels at 128 kbit/sec.
- 6) Use of time diversity over satellite significantly enhances the availability of the satellite reception by mobiles.



S. J. C.

Prepared By S. J. Campanella  
for Tompkinsville Nov 19 1998  
Witnessed By Noah Samon

Nov 19 1998

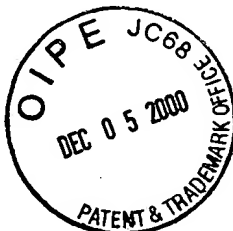


## UNITED STATES PATENT AND TRADEMARK OFFICE

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APPLICATION NUMBER	FILING/RECEIPT DATE	FIRST NAMED APPLICANT	ATTORNEY DOCKET NUMBER
09/640,686	08/18/2000	S Joseph Campanella	38492

Stacey J Longanecker  
Roylance Abrams Berdo & Gookman LLP  
Suite 600  
1300 19th Street NW  
Washington, DC 20036



## FORMALITIES LETTER



\*OC000000005454595\*

Date Mailed: 10/05/2000

## NOTICE TO FILE MISSING PARTS OF NONPROVISIONAL APPLICATION

FILED UNDER 37 CFR 1.53(b)

## Filing Date Granted

An application number and filing date have been accorded to this application. The item(s) indicated below, however, are missing. Applicant is given TWO MONTHS from the date of this Notice within which to file all required items and pay any fees required below to avoid abandonment. Extensions of time may be obtained by filing a petition accompanied by the extension fee under the provisions of 37 CFR 1.136(a).

- The statutory basic filing fee is missing.  
*Applicant must submit \$ 690 to complete the basic filing fee and/or file a small entity statement claiming such status (37 CFR 1.27).*
- Total additional claim fee(s) for this application is \$948.
  - \$558 for 31 total claims over 20.
  - \$390 for 5 independent claims over 3.
- The oath or declaration is missing.  
*A properly signed oath or declaration in compliance with 37 CFR 1.63, identifying the application by the above Application Number and Filing Date, is required.*
- To avoid abandonment, a late filing fee or oath or declaration surcharge as set forth in 37 CFR 1.16(e) of \$130 for a non-small entity, must be submitted with the missing items identified in this letter.
- The balance due by applicant is \$ 1768.

A copy of this notice **MUST** be returned with the reply.

Customer Service Center  
Initial Patent Examination Division (703) 308-1202

12/06/2000 CVRACHA 00000035 09640686  
01 FC:101  
02 FC:105  
710.00 OP  
130.00 OP